

FIG. 1

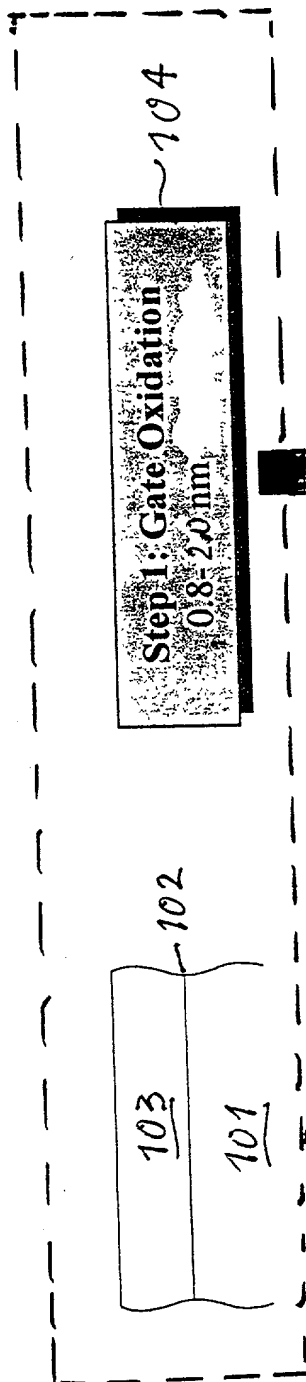


FIG. 2

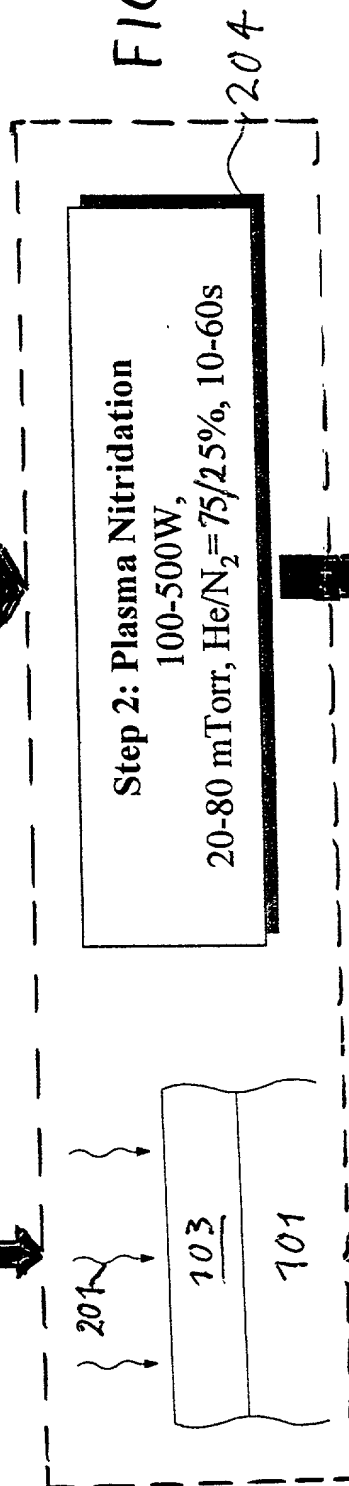
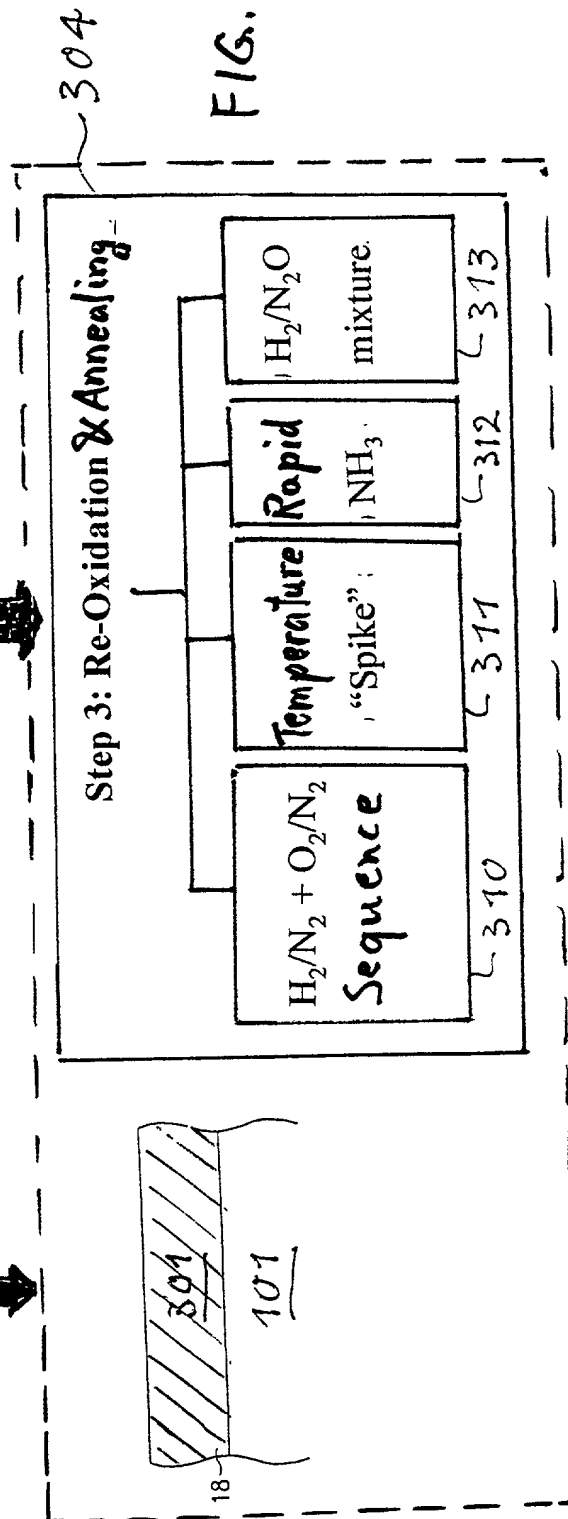


FIG. 3



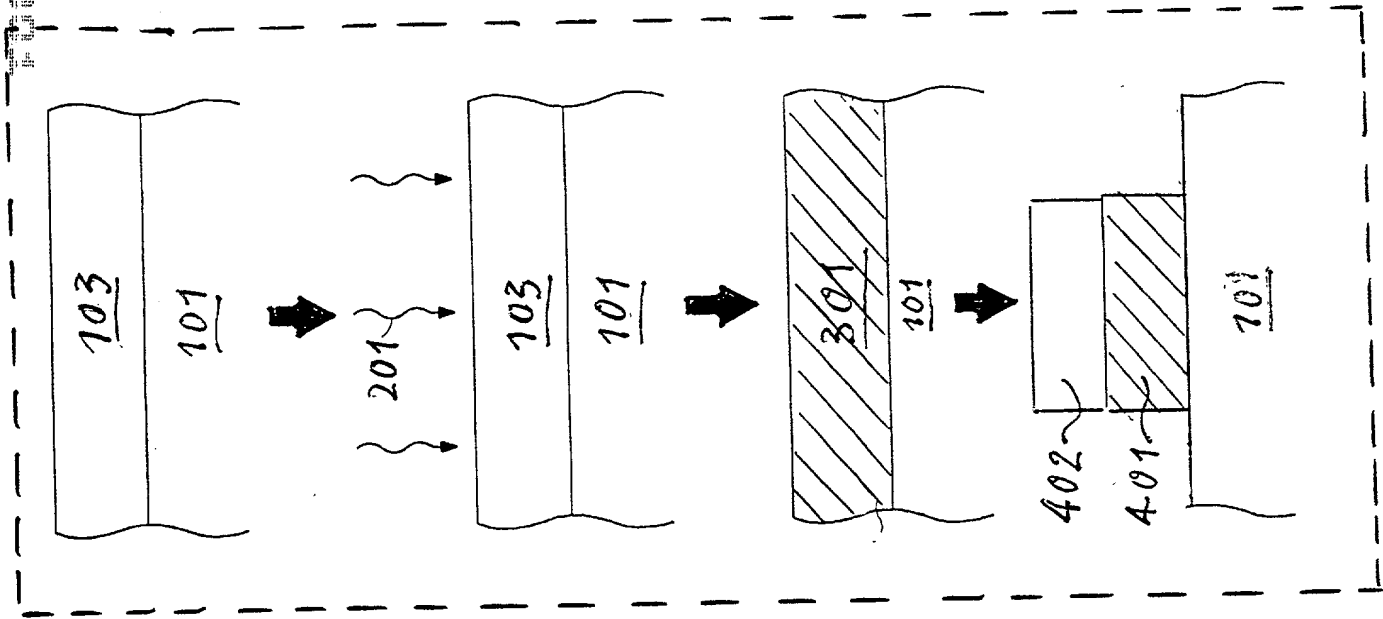


FIG. 4

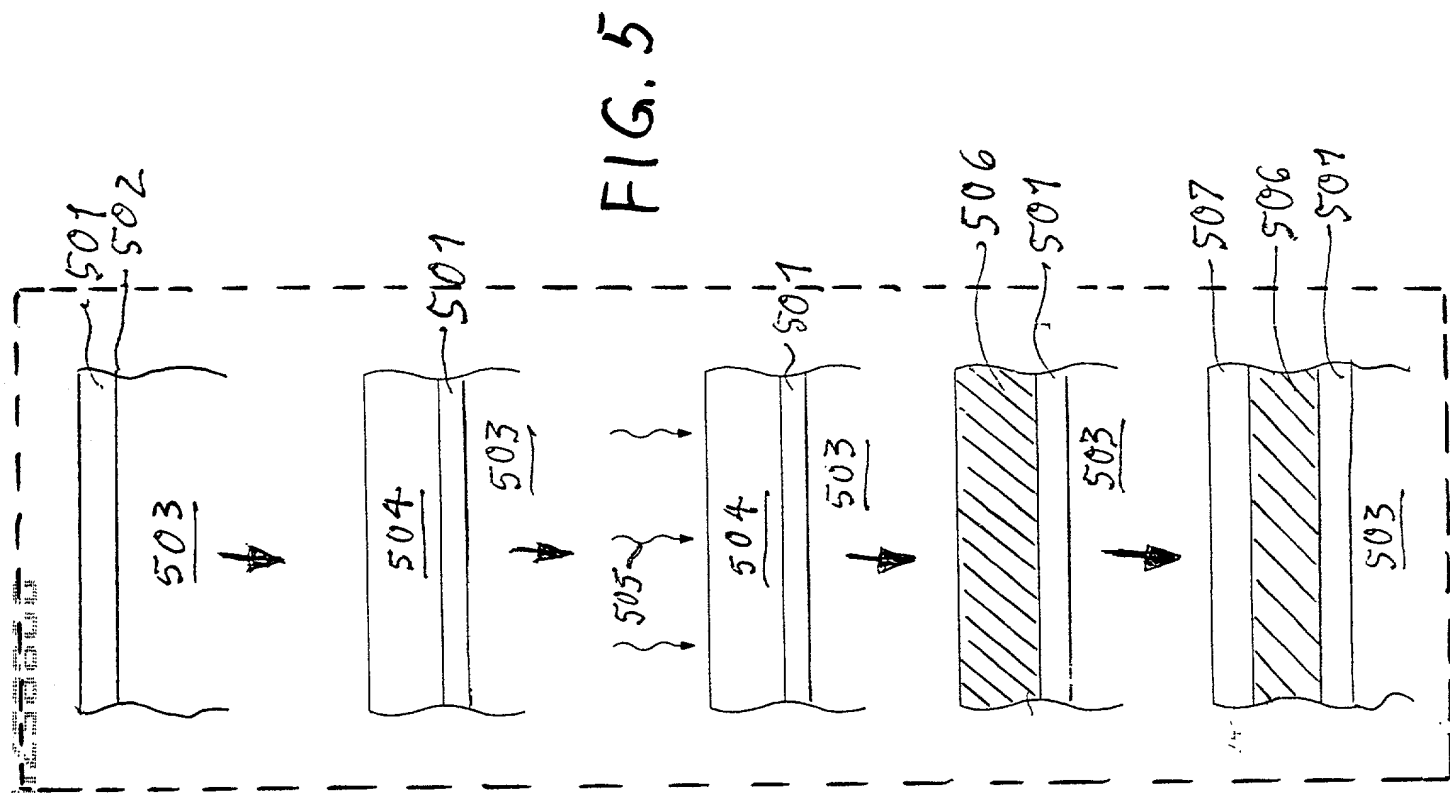


FIG. 5

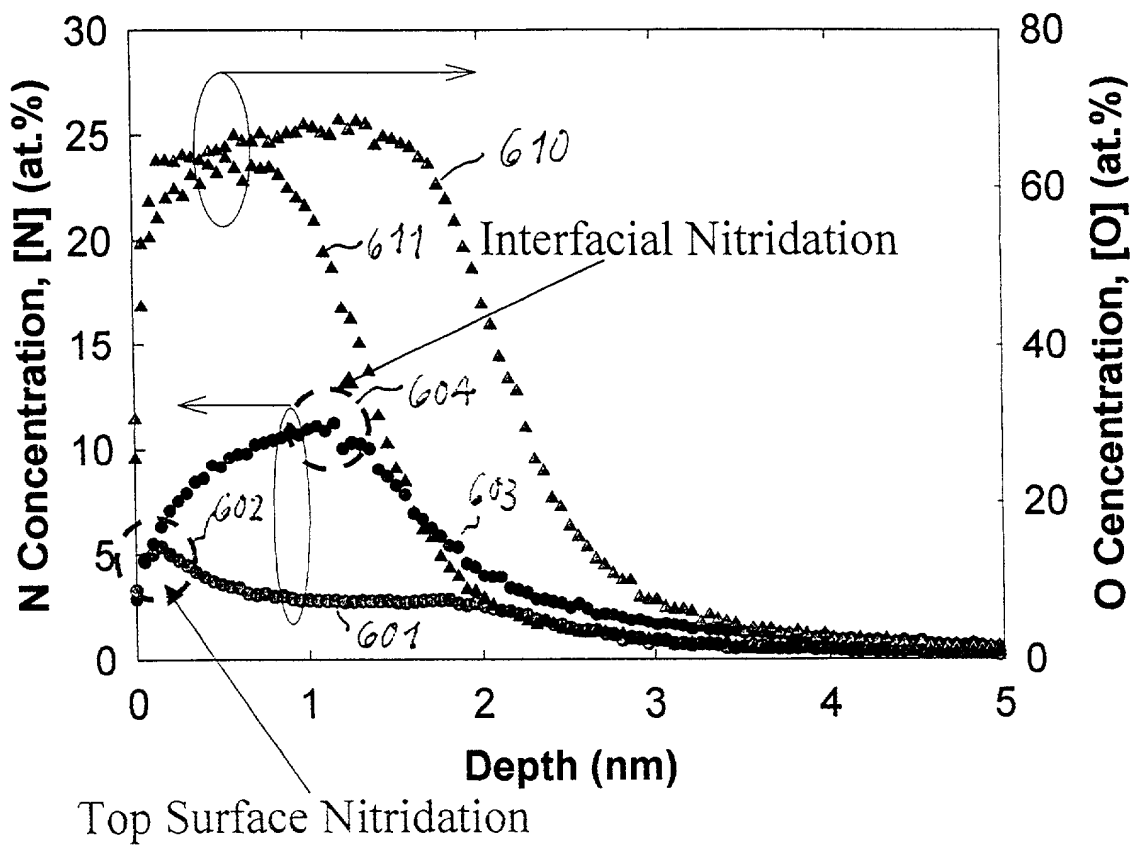


FIG. 6

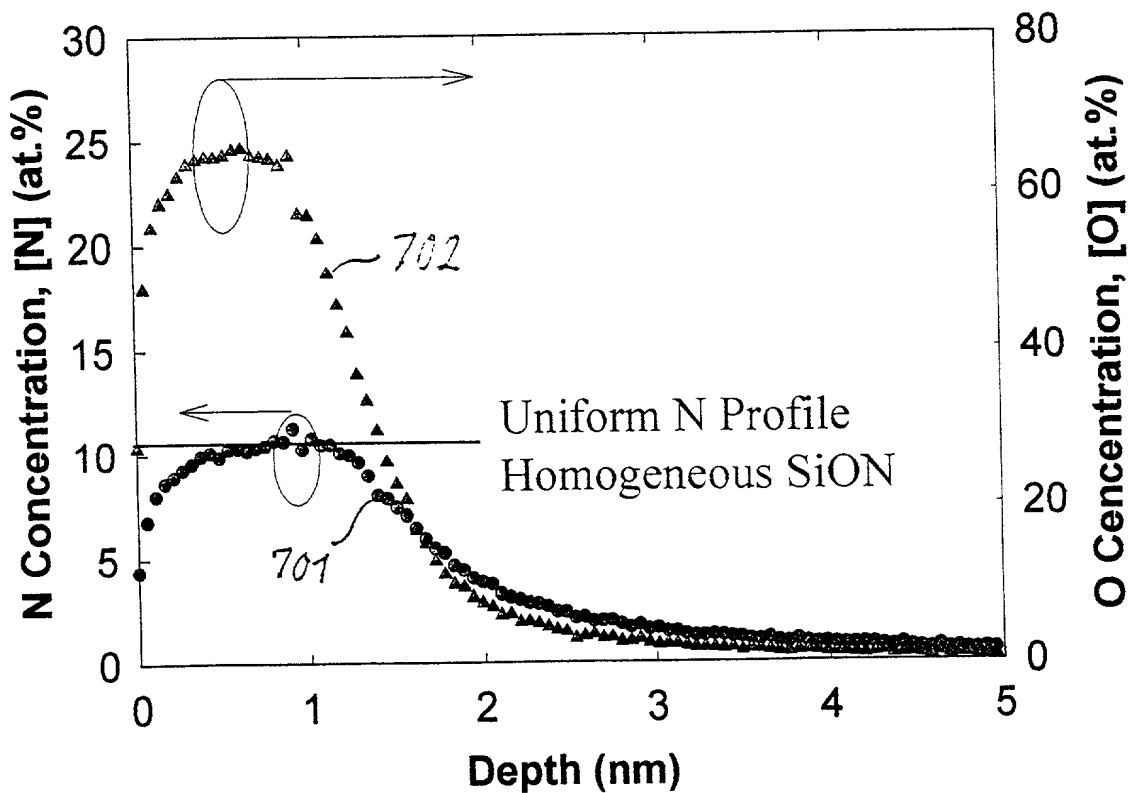
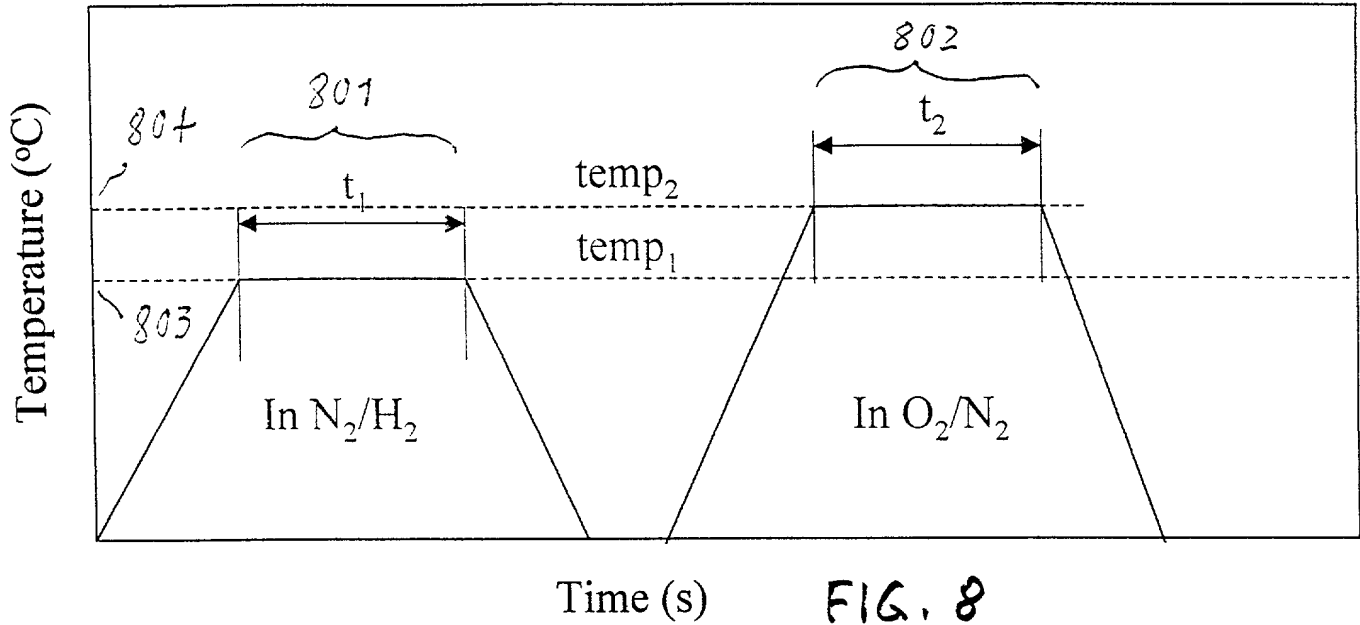


FIG. 7

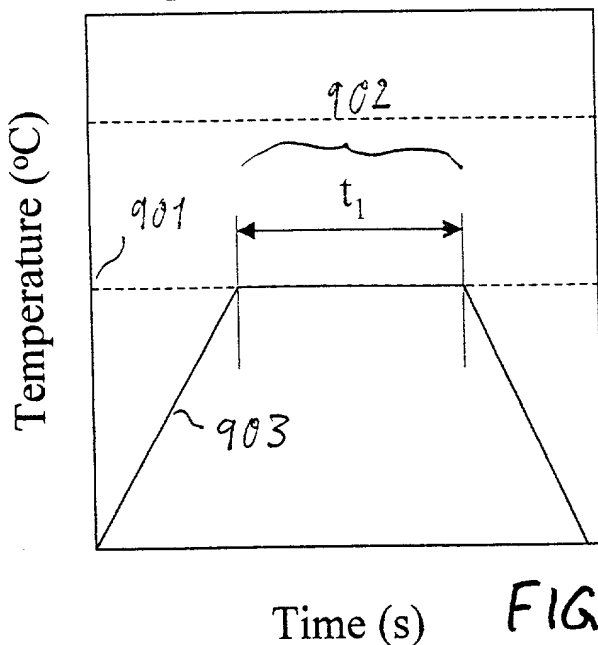
Temperature:  $\text{temp}_1 = 600\text{-}1000^\circ\text{C}$   
 $\text{temp}_2 = 800\text{-}1000^\circ\text{C}$   
 Time:  $t_1 = 5\text{-}60\text{s}$   
 $t_2 = 5\text{-}60\text{s}$

### Rapid Thermal Process

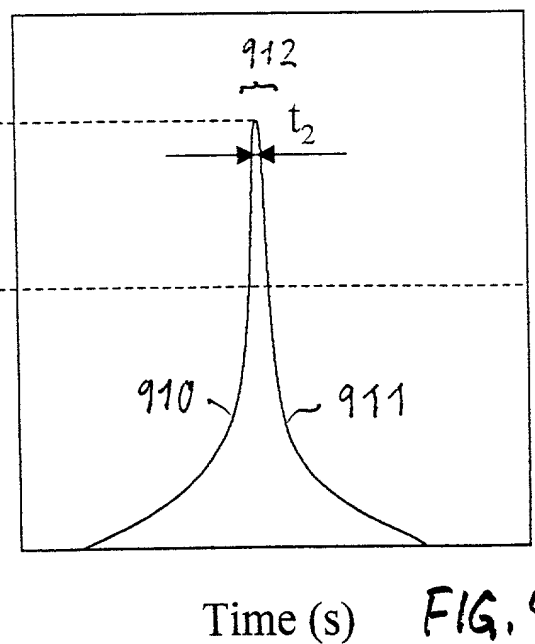


Temperature:  $\text{temp}_2 > \text{temp}_1, \bar{T}_2 > \bar{T}_1$   
 Time:  $t_2 \ll t_1$

### Conventional Rapid Thermal Process



### "Spike" Process



Temperature:  $T_1 = \text{temp}_1 = 600-1000^\circ\text{C}$   
 Time:  $t_1 = 5-60\text{s}$

### Rapid Thermal Process

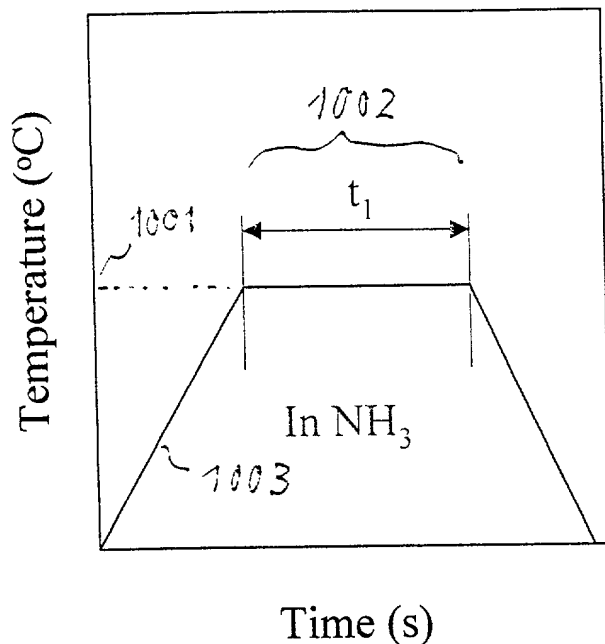


FIG. 10

Temperature:  $T_1 = \text{temp}_1 = 800-1050^\circ\text{C}$   
 Time:  $t_1 = 5-60\text{s}$

### Rapid Thermal Process

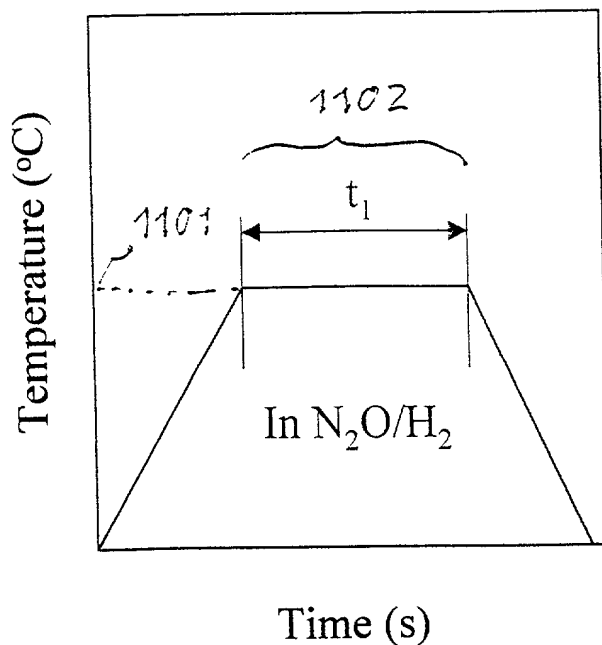


FIG. 11